Service Bulletin

Bulletin No.: 00-06-01-012N
Date: August, 2024

INFORMATION

Subject: **Use of Surface Conditioning Disks When Cleaning Gasket Sealing Surfaces and/or Reused Parts**

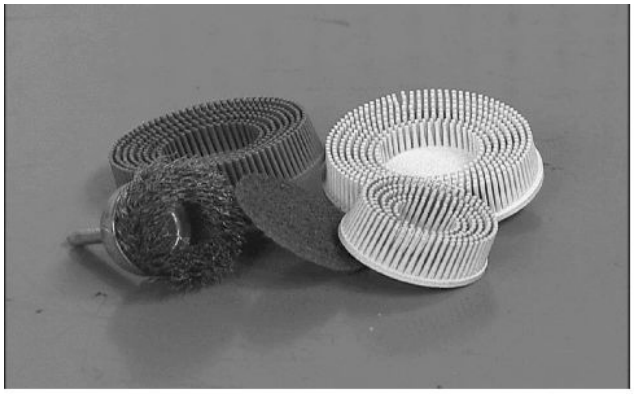
Models: **2025 and Prior GM Passenger Cars and Trucks including Silverado 4500HD, 5500HD and 6500HD (Excluding Chevrolet Medium Duty Low Cab Forward Equipped with Diesel Engine).**

Attention: **This bulletin also applies to any of the above models that may be North America Export vehicles.**

This bulletin has been revised to add the 2024-2025 Model Years. Please discard Corporate Bulletin Number 00-06-01-012M.

Important: Service agents must comply with all International, Federal, State, Provincial, and/or Local laws applicable to the activities it performs under this bulletin, including but not limited to handling, deploying, preparing, classifying, packaging, marking, labeling, and shipping dangerous goods. In the event of a conflict between the procedures set forth in this bulletin and the laws that apply to your dealership, you must follow those applicable laws.

The Use of Surface Conditioning Disks



Notice: Do not use abrasive pad/bristle devices to clean the gasket surfaces of any engine, transmission, transfer case and axles as well as any other component that contains lubricant. Abrasive pads should not be used for some of the following reasons:

- Abrasive pads will produce fine grit that the oil filter will not be able to remove from the oil. THIS GRIT IS ABRASIVE AND HAS BEEN KNOWN TO CAUSE INTERNAL ENGINE DAMAGE. Abrasive pads can easily remove enough material to round cylinder head surfaces. This has been known to affect the gasket's ability to seal, especially in the narrow seal areas between the combustion chambers and coolant jackets.
- Abrasive pads, wire and abrasive rubber finger wheels can also remove enough metal to affect cylinder head, block, oil pan rail, and intake manifold runner flatness, which can cause coolant and oil leaks and air leaks. It takes about 15♦seconds to remove 0.203♦mm (0.008♦in) of metal with an abrasive pad.
- Abrasive pads, Abrasive rubber fingers wheels & wire wheels with high speeds grinders produce airborne debris that can travel throughout the shop contaminating other work being performed outside of the immediate work area.

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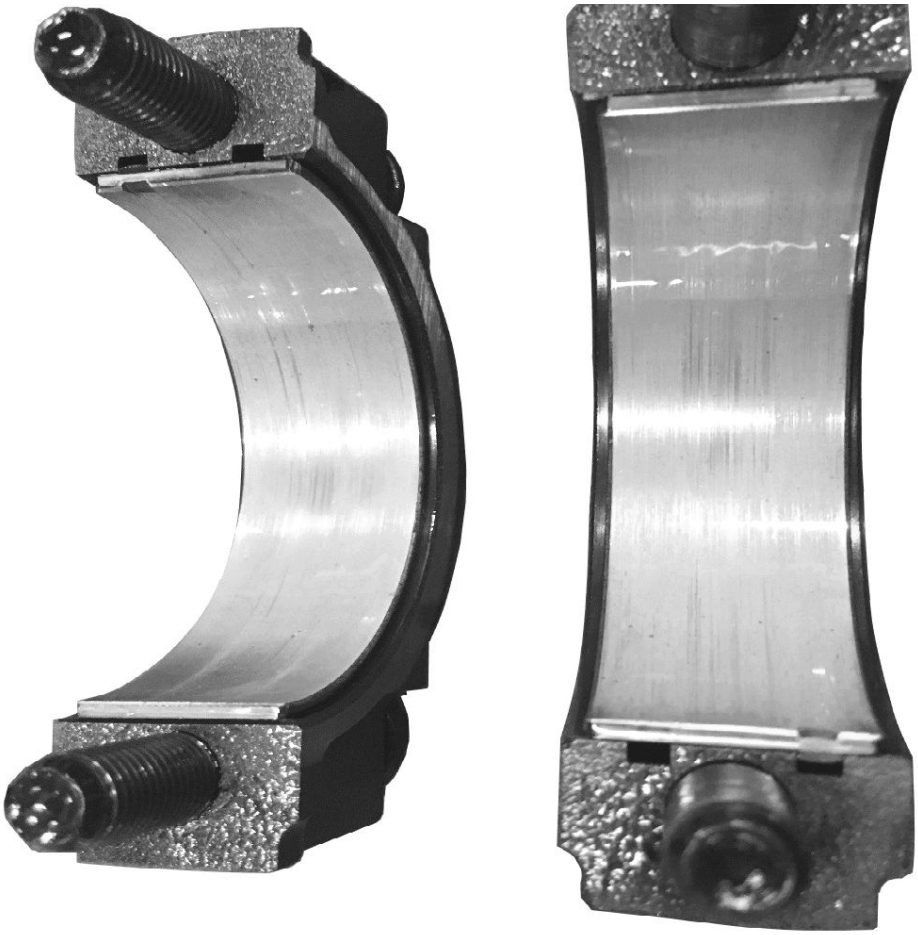
The use of an abrasive hand pads and/or steel wool can also create imperfections in the metal and therefore are not recommended for use when cleaning surfaces.

When cleaning gasket sealing surfaces and/or cleaning parts that are to be reused, surface conditioning disks, hand pads, or steel wool (typically constructed of woven fiber, steel, or molded bristles) that contain abrasives, such as a high amount of Aluminum Oxide, should NOT be used.

The use of such surface conditioning items dislodges Aluminum Oxide (from the disk) and metal particles (from steel wool), which can lead to premature engine bearing failure.

Examples



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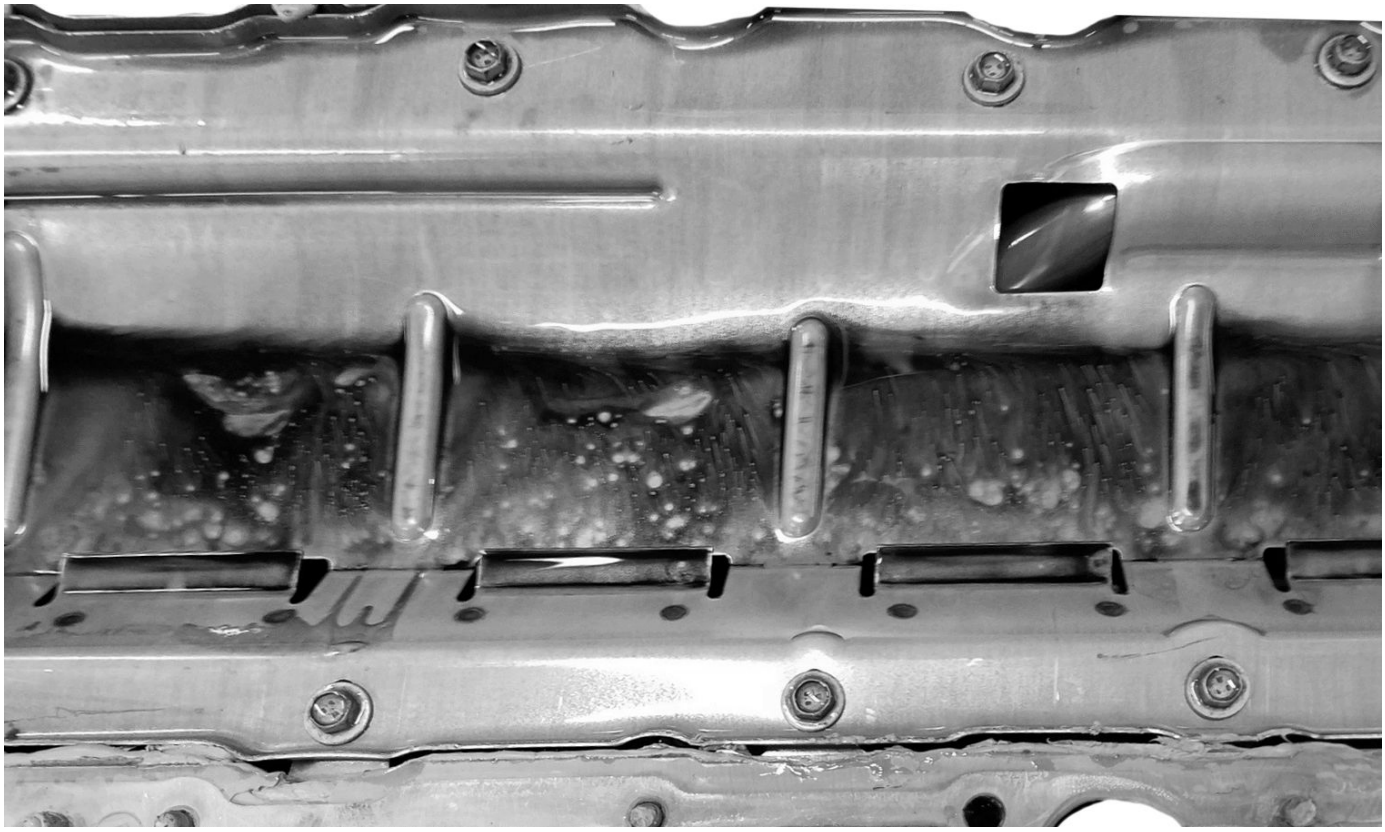
The presence of Aluminum Oxide in engine oil has been shown to cause premature engine bearing failure. In some cases, this failure occurs in as little as 2,200♦km (1,367♦mi) or less after the repair has been made.

The scratches on the bearings in the above picture were created when debris from an abrasive pad made its way into the bearing. This debris is a combination of the metal and particles from the abrasive pad that were removed when the engine was cleaned.

Surface conditioning disks may grind the component material and imbed it into the disk. This can result when more aggressive grinding of the gasket surface takes place.



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The crankshaft deflector in the picture above has debris that was left behind from the abrasive cleaning methods. Once the debris has gotten here, it can be distributed to any surface in the engine.

Recommended Cleaning Procedure

General Motors recommends the use of a razor blade or plastic gasket scraper to clean the gasket surface on components that are to be reused. When cleaning gasket surfaces, please note the following:

- When using a razor blade type gasket scraper, use a new razor blade for each cylinder head and corresponding block surface. Hold the blade as parallel to the gasket surface as possible. This will ensure that the razor blade does not gouge or scratch the gasket surfaces.
- Do not gouge or scrape the combustion chamber surfaces.
- Do not gouge or scratch any engine-sealing surface during the cleaning process.

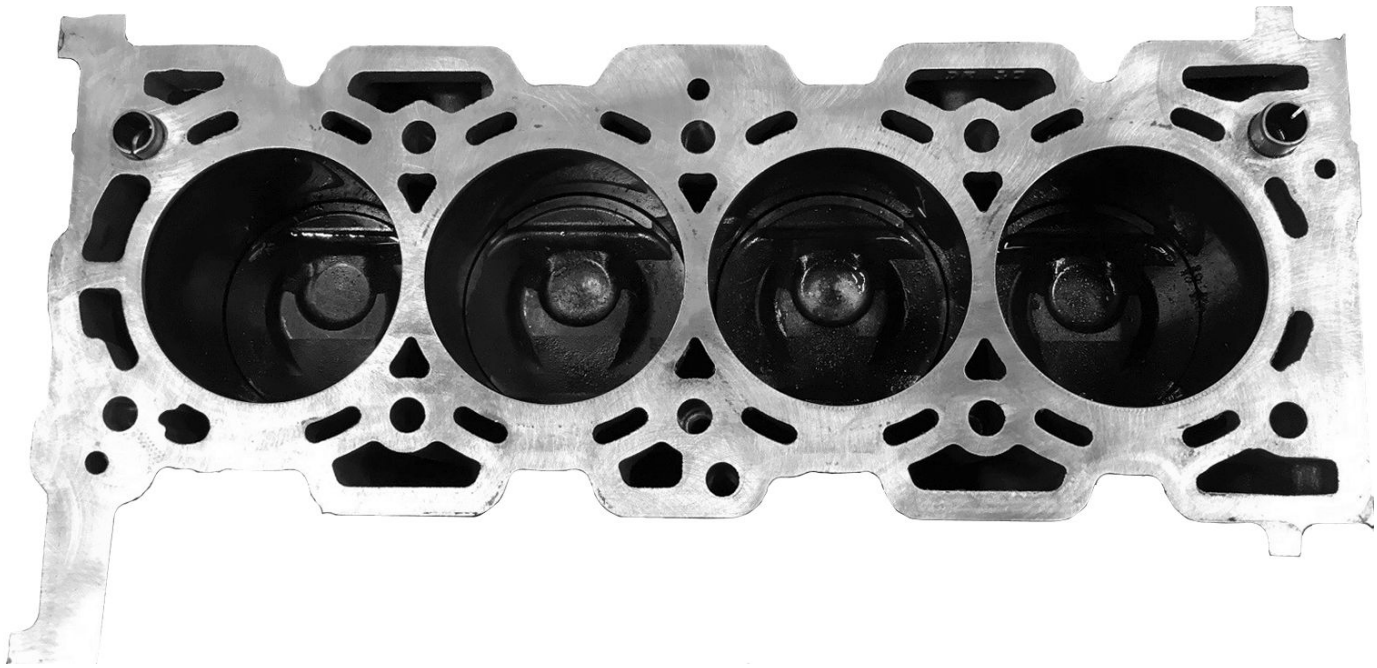
Alternative Cleaning Method:

To properly clean the sealing surface prior to reassembly, GM Low VOC Cleaner, P/N♦19287401, in Canada, P/N 88901247 and in Australia, P/N 88900163, should be sprayed on the mating surface. Use care to avoid getting solvent in any area other than the mating surface to be cleaned. Allow it to soak in for several minutes to loosen the old RTV sealer/gasket material. GM strongly recommends using a plastic razor blade or non- metallic scraper to remove all loose sealer/gasket material.

Important: The appearance of the gasket surface is not critical - the feel is. There will be indentations from the gasket left after all the gasket material is removed. The new gasket will fill these small indentations when it is installed.

Information on Non-Recommended Abrasive Pad/Bristle Surface Conditioning Disks

Important: Dealers who use improper gasket cleaning methods resulting in component failures will be debited the cost of the replacement and repair, and *possibly considered for restriction* with future replacements.



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An overview of the deck face when it has been cleaned with an abrasive pad, left swirls on the surface, and do not go in the same direction, which caused changes in the surface dimensions (flatness) of the block leaving it un-usable.

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Scratches from the pad are deeper in some areas than others causing the gasket/seals not to properly seal against an uneven surface.

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Note: Damage to the pistons and/or cylinder walls may result in an engine knocking, tapping and/or possible low compression.

The sides of this cylinder wall were scarred with scratches because of debris created by the abrasive cleaning pads. This debris gets trapped between the piston head and the cylinder wall causing damage to the cylinder bore as the piston moves up and down.

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The piston skirt and piston ring damage caused by abrasive cleaning pads.

Surface Preparation

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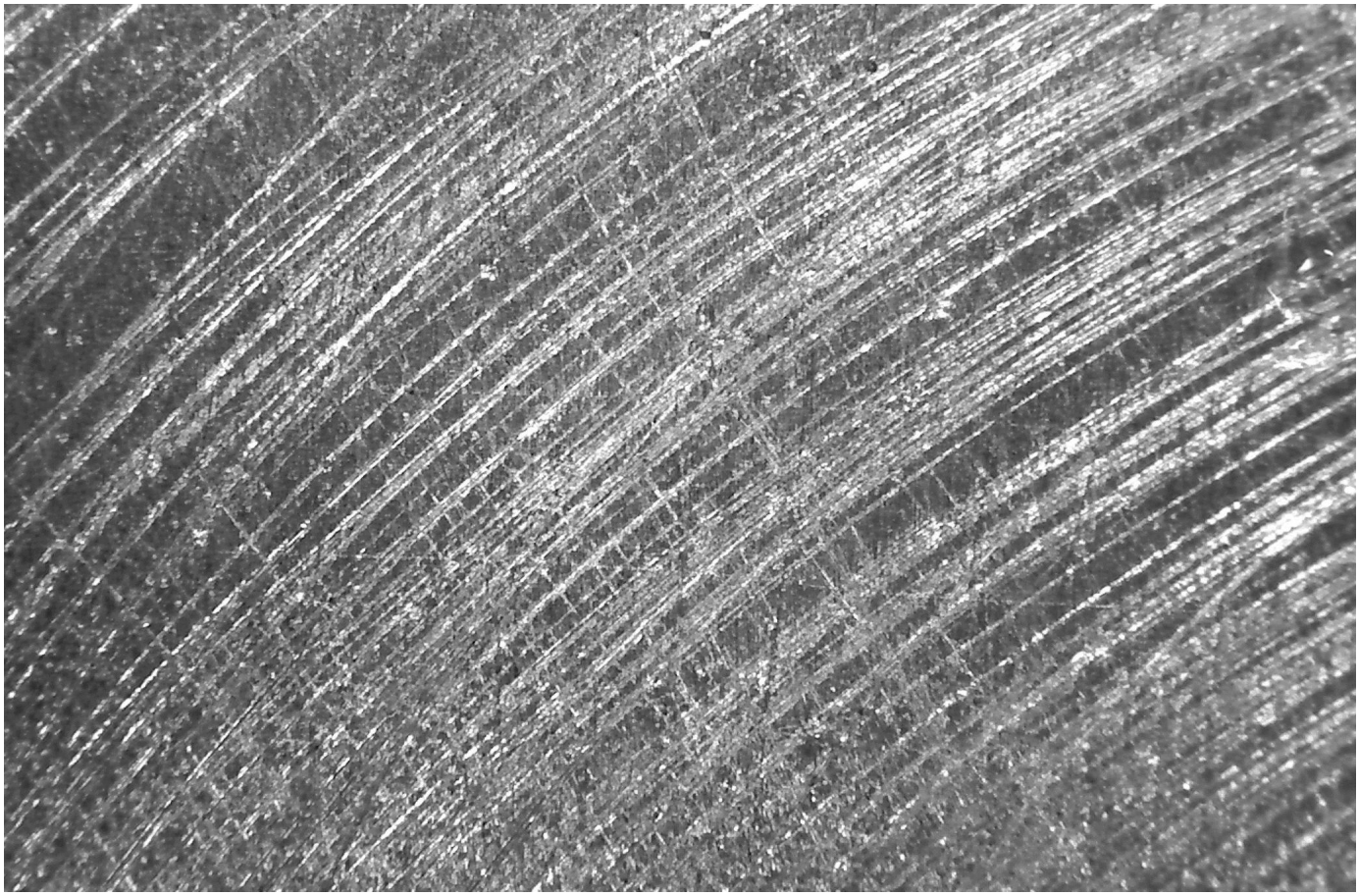
A close up of the sealing surface after cleaned with GM Low VOC Cleaner and plastic scraper.



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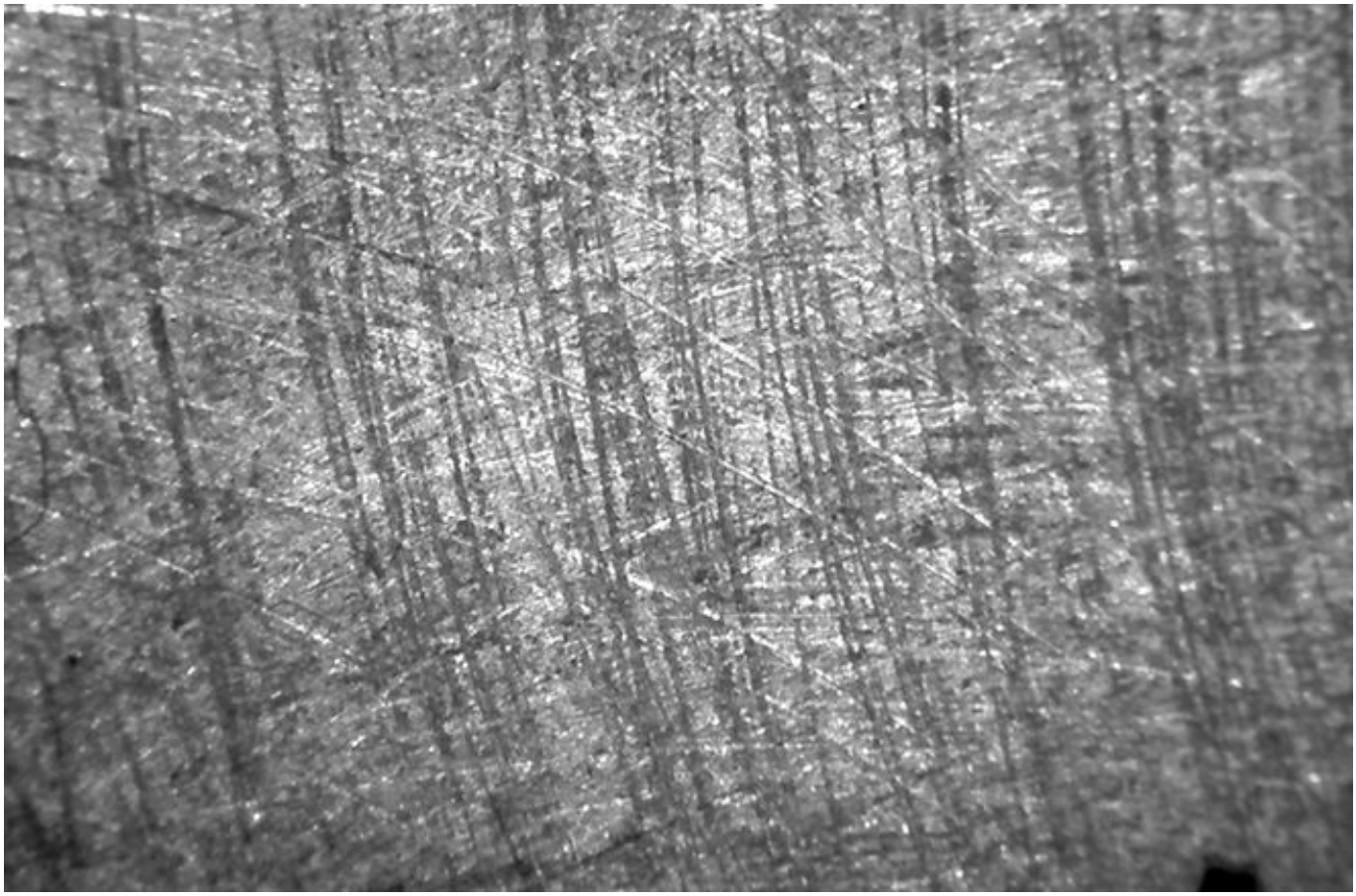
A close-up of the surface shows deep grooves caused by using an abrasive cleaning disc.



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A close-up of the surface shows deep grooves caused by use of a wire wheel.